AMENDMENT IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of decontaminating a fluid comprising:

(a) applying an electric field across a fluid having contaminants dispersed therein by flowing the fluid between an anode and a cathode of an electro-potential cell; wherein the anode comprises an elongated rod which tapers to a point in the direction of the cathode, and wherein the electric-potential is between about 800 and about 6,000 volts per inch between the anode and cathode and

(b) flowing the fluid through a decontamination cell to separate from the fluid at least a portion of the contaminants.

2. (Original) The method of claim 1, wherein the fluid comprises an aqueous slurry of cellulosic fibers.

3. (Original) The method of claim 2, wherein the fluid comprises an aqueous slurry of recycled wood pulp fibers.

4. (Original) The method of claim 3, wherein the recycled wood pulp fibers are obtained from newspapers, magazines, or corrugated containers.

5. (Original) The method of claim 2, wherein the cellulosic slurry has a consistency of between about 0.1 and 5%.

6. (Original) The method of claim 1, wherein the contaminants comprise particles selected from the group consisting of flexographic inks, conventional inks, microstickies, toner inks, wax particles, and combinations thereof.

7. (Original) The method of claim 1, wherein the electric field is generated by a direct current.

8. (Cancelled)

9. (Cancelled)

10. (Previously presented) The method of claim 1, wherein the electrical potential is between about 1000 and about 2000 volts per inch between the anode and cathode.

11. (Original) The method of claim 10, wherein the electrical potential is between about 1400 and about 1700 volts per inch between the anode and cathode.

12. (Previously presented) The method of claim 1, wherein the discharge surface area of the anode is approximately perpendicular to the cathode surface.

13. (Cancelled)

14. (Previously presented) The method of claim 1, wherein the electro-potential cell comprises a cylindrical housing in which the anode and cathode are secured, said housing having a fluid inlet through which the fluid enters the housing and a fluid outlet through which the fluid is discharged from the housing after passing through the electric field.

15. (Original) The method of claim 14, wherein the housing is cylindrical in shape, the fluid inlet having a central axis approximately coextensive with the central axis of the fluid outlet.

16. (Previously presented) The method of claim 1, wherein the electropotential cell comprises a T- or L-shape housing in which the anode and cathode are secured, said housing having a fluid inlet through which the fluid enters the housing and a fluid outlet through which the fluid is discharged from the housing after passing through the electric field, the fluid inlet being oriented approximately perpendicular to the fluid outlet.

17. (Original) The method of claim 1, wherein the decontamination cell comprises:

an elongated cell that includes:

i. a longitudinal axis and an interior surface defining a decontamination chamber;

ii. a fluid inlet end;

iii. an opposed fluid outlet end; and

iv. a light contaminant collection hood within an upper portion of the decontaminating chamber in fluid communication with the chamber and having an upper port for purging light contaminants therethrough,

wherein said light contaminants purging is effected by a fluid head which creates a fluid flow gradient within the decontaminating chamber between turbulent flow adjacent the inlet end and laminar flow adjacent the outlet end such that a transitional flow region is at least partially adjacent the collection hood.

18. (Original) The method of claim 17, wherein the elongated cell further comprises a heavy contaminant collection trough for separating heavy contaminants from the fluid.

19. (Original) The method of claim 1, further comprising, before step (a), introducing gas bubbles into the fluid, wherein, in step (b) the decontamination cell separates from the fluid at least a portion of the bubbles with the contaminants.

20. (Original) The method of claim 19, wherein the gas consists essentially of air.

21. (Original) The method of claim 19, wherein the bubbles have a mean diameter between about 30 and about 60 microns.

22. (Original) The method of claim 21, wherein the bubbles have a mean diameter between about 40 and about 50 microns.

23. (Previously presented) The method of claim 19, wherein the gas bubbles are introduced by gas injection into the fluid, wherein said fluid is flowing at a velocity between about 3 and 20 ft/sec.

24. (Original) The method of claim 23, wherein the velocity is between about 5 and 9 ft/sec.

25-47 (Cancelled).